TÜV®

TÜV NORD

Geotechnical Investigation & Consultancy

A safe and economic foundation design is crucial for all construction projects including wind turbines. The reliability of all further structural components and service installations depend on a successful foundation design. Modern wind turbines with increasing hub heights and larger rotor diameters produce extremely high bearing loads and have stringent requirements for the subsoil conditions. Suitability should be carefully assessed by geotechnical experts to avoid expensive project risks such as damage to the foundation base or even turbine collapse due to unsuitable subsoil properties.

TÜV NORD geotechnical site investigations provide necessary data for optimized foundation design and confidence regarding site load bearing capacity.
TÜV NORD site investigations and geotechnical reports conform to the requirements and regulations of Eurocode 7 or national standards, depending on customer needs. Safe and economic foundation designs for innovative foundation design methods such as floating or re-adjustable foundation bases even on critical locations (e.g. refilled quarries and coal mines) are possible.

Please contact us for further details.

TÜV NORD has long experience and references in the fields of site investigations and foundation design consultancy for wind farm projects. For the planning of wind farm projects, our experts offer site investigations worldwide. Among others, our main geotechnical services for investors, project developers and turbine manufacturers are:

- Geological desk studies
- Special types of drillings, borings and soundings
- Soilmechanical laboratory tests
- Geophysical investigation methods
- Structural safety calculations
- Quality and safety management
- Inspection of the excavation pits
- Geotechnical reports
- Plausibility check of geotechnical reports

Please contact: renewables@tuev-nord.de